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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/597,792	08/08/2006	Massimo Bani	PB60734USW	6405
23347	7590	04/16/2009	EXAMINER	
GLAXOSMITHKLINE CORPORATE INTELLECTUAL PROPERTY, MAI B482 FIVE MOORE DR., PO BOX 13398 RESEARCH TRIANGLE PARK, NC 27709-3398			FRAZIER, BARBARA S	
			ART UNIT	PAPER NUMBER
			1611	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

USCIPRTP@GSK.COM
LAURA.M.MCCULLEN@GSK.COM
JULIE.D.MCFALLS@GSK.COM

Office Action Summary	Application No. 10/597,792	Applicant(s) BANI, MASSIMO	
	Examiner BARBARA FRAZIER	Art Unit 1611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8 and 10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8 and 10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/19/08</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of Claims

1. Claims 8 and 10 are pending in this application. Cancellation of claims 7 and 9 is acknowledged. Addition of new claim 10 is acknowledged. Claims 1-6 stand canceled.
2. It is noted that new claim 10 is a substantial duplicate of claim 7, now canceled.
3. Claims 8 and 10 are examined.

Claim Rejections - 35 USC § 103

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
5. **Claims 8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Armour et al (WO 95/08549) in view of Carlson et al (US Patent 6,117,855).**

The claimed invention is drawn to a method of treatment of social phobia which comprises administering to a human in need thereof an effective amount of [2-methoxy-5-(5-trifluoromethyl-tetrazol-1-yl-benzyl)]-([2S,3S]-2-phenyl-piperidin-3-yl) amine or a pharmaceutically acceptable salt thereof (see claim 8). A specific salt is the dihydrochloride salt (see claim 10).

Armour et al teach 3-(5-tetrazolyl-benzyl)amino-piperidine derivatives (abstract). The compounds are potent and specific NK₁ antagonists (page 10, line 9). A preferred compound is [2-methoxy-5-(5-trifluoromethyl-tetrazol-1-yl-benzyl)]-(2S-phenyl-piperidin-3S-yl) amine, and pharmaceutically acceptable salts, especially the dihydrochloride

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salts (page 8, lines 24-29). The compounds may be useful in the treatment of CNS disorders, in particular psychoses such as anxiety (page 11, lines 8-10).

Armour et al do not specifically teach that the anxiety disorder to be treated is social phobia.

Carlson et al. generally teach that, when NK-1 receptor antagonists are used to treat anxiety, the term "anxiety" includes specific phobias such as social phobia (col. 4, lines 37-44).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use the compound as taught by Armour et al to treat social phobia; thus arriving at the claimed invention. One skilled in the art would have been motivated to do so because Armour et al fairly suggests the use of [2-methoxy-5-(5-trifluoromethyl-tetrazol-1-yl-benzyl)]-(2S-phenyl-piperidin-3S-yl) amine or its salt for the treatment of anxiety, such that one skilled in the art would reasonably expect the NK1 antagonists to be useful in the treatment of anxiety. Additionally, Carlson et al teach that the term "anxiety" includes social phobia when using NK-1 receptor antagonists to treat anxiety. One would reasonably expect success from the use of [2-methoxy-5-(5-trifluoromethyl-tetrazol-1-yl-benzyl)]-([2S,3S]-2-phenyl-piperidin-3-yl) amine to treat an anxiety disorder as taught by Armour et al wherein the anxiety disorder is social phobia as taught by Carlson et al because both references are drawn to the use of NK1 antagonists to treat anxiety.

Response to Arguments

6. Applicant's arguments filed 12/19/08 have been fully considered but they are not persuasive.

Applicants argue that, to establish a prima facie case of obviousness, the Patent Office must satisfy three criteria, according to MPEP 2143. However, it is pointed out that the criteria upon which Applicant relies, i.e., that the prior art and general knowledge must contain some suggestion or incentive that would have motivated the skilled artisan to modify the reference, with a reasonable expectation of success, is only one of at least seven exemplary rationale that may be used to establish a prima facie case of obviousness (see MPEP 2143). Even so, the Examiner will respond to each of Applicant's arguments in turn:

(1) Applicants first argue that one of skill in the art would have found no motivation to use the particular claimed compound to successfully treat social phobia, citing that Carlson does not particularly recite the instant claimed compound or other NK-1 antagonists having similar structures, and that the prior art does not teach, suggest, or provide an incentive to make the claimed compound.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In the instant rejection, the claimed compound is recited in Armour, as stated above, for treating anxiety. Further, as stated above, the teachings of Carlson are relied

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upon merely to demonstrate that one skilled in the art of treating anxiety with NK-1 antagonists would understand that the term “anxiety” would include social phobia, as taught by Carlson, and therefore one skilled in the art would reasonably expect that the method of Armour would also treat social phobia. It is noted that this understanding of the term “anxiety” is consistent with Applicant’s, as evidenced by Applicant’s specification, which describes social phobia as a type of anxiety, and the symptoms of social phobia as anxiety symptoms (for example, see page 3, lines 38-42 and page 7, lines 12-23 of Applicant’s specification).

(2) Applicants also argue that one of skill in the art would have had no reasonable expectation of success that administering any NK-1 antagonist, which had efficacy for anxiety would also have efficacy for treating social phobia. Applicants cite the reference filed with the IDS of 12/19/08, which teaches that the compound LY686017, and assert that said compound had efficacy in preclinical anxiety models, but did not translate into clinical efficacy in social anxiety disorder.

This argument is not persuasive because one skilled in the art would still reasonably expect that a NK-1 antagonist useful for treating anxiety would include treatment of social phobia, based on the teachings of Armour and Carlson, for reasons stated above. The reference cited by Applicants does not demonstrate that the compound **of Armour** (i.e., the compound of the claimed invention) would not be reasonably expected to treat social phobia, and Applicants have not presented any objective evidence demonstrating that the compound **of Armour** would not be reasonably expected to treat social phobia by one skilled in the art.

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(3) Applicants finally argue that Armour and Carlson taken together fail to teach or suggest all the limitations in applicant's claim 1, because the compound is simply not listed in either reference as having efficacy in the treatment of social phobia.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). The instant rejection is based on the combination of Armour and Carlson, wherein Armour teaches the claimed compound is a NK-1 antagonist for treating anxiety, and Carlson teaches that one skilled in the art of NK-1 antagonists would understand that "anxiety" would include social phobia.

Therefore, it is the Examiner's position that the claims are rendered obvious.

Double Patenting

7. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to

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be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

8. **Claims 8 and 10 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 19 and 20 of copending Application No. 10/552,870.** Although the conflicting claims are not identical, they are not patentably distinct from each other because they are drawn to the same subject matter and composition components.

The instant application claims a method of treatment of social phobia which comprises administering to a human in need thereof an effective amount of [2-methoxy-5-(5-trifluoromethyl-tetrazol-1-yl-benzyl)]-([2S,3S]-2-phenyl-piperidin-3-yl) amine or a pharmaceutically acceptable salt thereof (see claim 8). A specific salt is the dihydrochloride salt (see claim 10).

Copending application '870 claims a method for the treatment of anxiety comprising administering a therapeutically effective combination of [2-methoxy-5-(5-trifluoromethyl-tetrazol-1-yl-benzyl)]-([2S,3S]-2-phenyl-piperidin-3-yl) amine or a pharmaceutically acceptable salt thereof and paroxetine or a salt thereof (claim 19).

Copending application '870 does not specifically teach a method for the treatment of social phobia, and also includes the additional agent paroxetine. However, one skilled in the art would understand "anxiety" to include social phobia, based on the definition of "anxiety" given in the parent international application of application '870 (see WO 2004/91617, page 7, lines 28 and 32). Furthermore, Applicant's open-ended term "comprising" allows for the presence of additional agents, including paroxetine.

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Additionally, the phrase "an effective amount" in claim 8 of the instant application is not limited to certain dosage range, but can include dosage ranges where additional active agents, such as paroxetine, are present.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Response to Arguments

9. Applicant's arguments filed 12/19/08 have been fully considered but they are not persuasive.

Applicants argue that the treatment of social phobia is not prima facie obvious over a description of treating anxiety, and that the '870 application's claims would lead one of skill in the art away from the present invention because of its recitation of 1) anxiety instead of social phobia, 2) combinations with paroxetine instead of the instant monotherapy, and 3) lower than expected dosages of the combination instead of the an effective amount of 2-methoxy-5-(5-trifluoromethyl- tetrazol-1-yl-benzyl)-([2S,3S]-2-phenyl-piperidin-3-yl)-amine.

This arguments is not persuasive because 1) one skilled in the art would understand "anxiety" to include social phobia, based on the definition of "anxiety" given in the parent international application of application '870 (see WO 2004/91617, page 7, lines 28 and 32), 2) Applicant's open-ended term "comprising" allows for the presence of additional agents, including paroxetine, and 3) the phrase "an effective amount" in claim 8 of the instant application is not limited to certain dosage range, but can include dosage ranges where additional active agents, such as paroxetine, are present.

Conclusion

No claims are allowed at this time.

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BARBARA FRAZIER whose telephone number is

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(571)270-3496. The examiner can normally be reached on Monday-Thursday 9am-4pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sharmila Landau can be reached on (571)272-0614. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BSF

/Sharmila Gollamudi Landau/

Supervisory Patent Examiner, Art Unit 1611